1 # DISK DRIVE FOR CIRCULAR SELF SERVO WRITING AND SPIRAL SELF

2 # SERVO WRITING USING PREWRITTEN REFERENCE SERVO BURSTS

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4 ## ABSTRACT OF THE DISCLOSURE

5   A disk drive is disclosed comprising a disk and a head actuated radially over the disk. An

6 external servo writer is used to write reference servo bursts to the disk at a coarser radial

7 resolution than product servo bursts. During a self servo writing operation, the reference servo

8 bursts are processed to servo circularly to write a first set of product servo bursts to the disk.

9 The reference servo bursts are also processed to servo spirally to write a second set of product

10 servo bursts to the disk.